

IN THE CLAIMS:

Please add new Claims 22 to 32, cancel Claims 4 to 7 and 19 without prejudice or disclaimer of subject matter, and amend Claims 1, 10, 11, 15, 18, 20 and 21, as shown below.

1. (Currently Amended) A two-dimensional image pickup apparatus comprising:

an apparatus cabinet having an inner mounting surface and a deformable top plate; and

a two-dimensional photoelectric converter unit contained in said apparatus cabinet and carried by a base member which is directly mounted onto said inner mounting surface, said two-dimensional photoelectric converter unit comprising a substrate and a plurality of photoelectric converters formed on said substrate;

~~an apparatus cabinet containing therein a substrate member and a two-dimensional photoelectric converter unit having a light receiving surface;~~

~~the light receiving surface comprising a plurality of photoelectric converters formed on said substrate member;~~

~~said photoelectric converter unit being arranged on a base member; and~~

~~said cabinet having a deformable top plate located opposite to said light receiving surface of said photoelectric converter unit and~~

wherein said top plate is arranged opposite to a light-receiving surface of said two-dimensional photoelectric converter unit, and is being less rigid than said base member.

2. (Previously Presented) A two-dimensional image pickup apparatus according to claim 1, wherein said top plate can return to an original position after deformation.

3. (Previously Presented) A two-dimensional image pickup apparatus according to claim 1, wherein the magnitude of deformation of said top plate is greater than that of said substrate member.

4. to 7. (Cancelled)

8. (Previously Presented) A two-dimensional image pickup apparatus according to claim 1, wherein said top plate is comprised of resin.

9. (Previously Presented) A two-dimensional image pickup apparatus according to claim 8, wherein the resin contains carbon-fiber-reinforced resin.

10. (Currently Amended) A two-dimensional image pickup apparatus according to claim 1, wherein said two-dimensional photoelectric converter unit includes a fluorescent body.

11. (Currently Amended) A two-dimensional image pickup apparatus comprising:

an apparatus cabinet;

a substrate;

a photoelectric converter unit contained in said apparatus cabinet and positioned out of contact with said apparatus cabinet, said photoelectric converter unit comprising a substrate and having a plurality of photoelectric converters formed on said substrate at a light-receiving surface of said substrate; and

~~a cabinet containing said photoelectric converter unit; and~~

a shock absorber ~~disposed~~ arranged between said light-receiving surface of said substrate ~~photoelectric converter unit~~ and said apparatus cabinet.

12. (Previously Presented) A two-dimensional image pickup apparatus according to claim 11, wherein said shock absorber comprises one or more containers.

13. (Previously Presented) A two-dimensional image pickup apparatus according to claim 12, wherein each of the one or more containers contains a gas in a sealed state.

14. (Previously Presented) A two-dimensional image pickup apparatus according to claim 12, wherein the one or more containers are air bags.

15. (Currently Amended) A two-dimensional image pickup apparatus according to claim 11, further comprising:

a circuit board for processing electric signals relating to said photoelectric converters, said circuit board contained in said apparatus cabinet and having electronic parts; and

a cooling device held in contact with the electronic parts of said circuit board.

16. (Previously Presented) A two-dimensional image pickup apparatus according to claim 15, wherein said cooling device comprises one or more containers containing a cooling liquid therein.

17. (Previously Presented) A two-dimensional image pickup apparatus according to claim 11, wherein said shock absorber contains a gelled material.

18. (Currently Amended) A two-dimensional image pickup apparatus according to claim 11, wherein said ~~photoelectric converter unit has a light receiving surface comprised of the plurality of photoelectric converters and said shock absorber entirely covers the~~ light-receiving ~~light receiving surface of said photoelectric converter unit.~~

19. (Cancelled)

20. (Currently Amended) A radiation detecting device including a two-dimensional image pickup apparatus comprising
an apparatus cabinet; and
a two-dimensional photoelectric converter unit contained in said apparatus cabinet and positioned out of contact with said apparatus cabinet, said two-dimensional

photoelectric converter unit comprising a substrate member, a light-receiving surface, a fluorescent member, and a shock absorber,

wherein said light-receiving surface comprises a plurality of photoelectric converters formed on said substrate member,

wherein said fluorescent member is arranged between said light-receiving surface and said apparatus cabinet, and

wherein said shock absorber is arranged between said fluorescent member and said apparatus cabinet

~~containing therein (i) a substrate member, (ii) a two-dimensional photoelectric converter unit having a light receiving surface comprising a plurality of photoelectric converters formed on a substrate member, (iii) a fluorescent member arranged at a side of said light receiving surface, and (iv) a shock absorber arranged between said fluorescent member and said apparatus cabinet.~~

21. (Currently Amended) A radiation detecting apparatus according to claim 20, wherein said ~~sock~~ shock absorber covers ~~entirely~~ the entire light-receiving ~~light receiving~~ surface of said photoelectric converter unit.

22. (New) A radiation detecting apparatus comprising:
an apparatus cabinet;
a photoelectric converter unit contained in said apparatus cabinet and positioned out of contact with said apparatus cabinet, wherein said photoelectric converter unit comprises a substrate, a plurality of photoelectric converters formed on said substrate,

and a fluorescent member arranged at a light-receiving surface of said photoelectric converter unit; and

a shock absorber arranged between the light-receiving surface of said photoelectric converter unit and said apparatus cabinet.

23. (New) A radiation detecting apparatus according to Claim 22, wherein said shock absorber comprises one or more containers.

24. (New) A radiation detecting apparatus according to Claim 23, wherein each of the one or more containers contains a gas in a sealed state.

25. (New) A radiation detecting apparatus according to Claim 24, wherein the one or more containers are air bags.

26. (New) A radiation detecting apparatus according to Claim 22, further comprising:

a circuit board for processing electric signals relating to said photoelectric converters, said circuit board contained in said apparatus cabinet and having electronic parts; and

a cooling device held in contact with the electronic parts of said circuit board.

27. (New) A radiation detecting apparatus according to Claim 22, wherein said cooling device comprises one or more containers containing a cooling liquid therein.

28. (New) A radiation detecting apparatus according to Claim 25, wherein said shock absorber contains a gelled material.

29. (New) A radiation detecting apparatus according to Claim 22, wherein said shock absorber covers the entire light-receiving surface of said photoelectric converter unit.

30. (New) A two-dimensional image pickup apparatus according to Claim 1, further comprising a space between the deformable top plate and the light-receiving surface of said two-dimensional photoelectric converter unit.

31. (New) A two-dimensional image pickup apparatus according to Claim 30, wherein said space is dimensioned to receive inward deformations of the deformable top plate without contact to the light-receiving surface of said two-dimensional photoelectric converter unit.

32. (New) A two-dimensional image pickup apparatus according to Claim 31, wherein said space is empty.